U.S. Pat. Appln. No. 10/682,520 Group Art Unit: 3679

Examiner: E.K. Nicholson

Amendments to the Claims:

Please amend claims 1-16, as to read as follows.

1. (Currently Amended) A pipe segment (1) of definite length for oil extraction

industry made of a metal, having a central portion with a substantially cylindrical

wall and at least a threaded end portion (3, 4) covered with a surface protection

characterised in that at least the metal surface in of the threaded end portion (3, 4)

has a surface roughness (Ra) comprised between 2,0 µm and 6,0 µm, said surface

protection being constituted by a first uniform layer (7) of a dry corrosion inhibiting

coating and said first layer (7) being covered by made of an epoxy resin containing

particles of Zn and a second uniform layer (8) of dry lubricant coating covering said

first layer (7).

2. (Cancelled)

3. (Currently Amended) The pipe segment according to claim 2 1, wherein the

first layer (7) has a thickness comprised between 10 and 20 μm.

4. (Original) The pipe segment according to claim 1, wherein the second layer

(8) is made of an inorganic binder and a mixture of particles of solid lubricants, one

of which is molybdenum disulphide.

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5. (Original) The pipe segment according to claim 4, wherein the second layer

(8) has a thickness between 10 and 20  $\mu m$ .

. . .

6. (Original) The pipe segment according to claim 1, wherein said threaded

end portion is of conical or frusto-conical envelope.

7. **(Original)** The pipe segment according to claim 1, wherein said threaded end

portion is of cylindrical envelope.

8. **(Original)** The pipe segment according to claim 6, wherein the pipe is

threaded as a male member of a connection.

9. **(Original)** The pipe segment according to claim 6, wherein the pipe is

threaded as a female member of a connection.

10. **(Currently Amended)** A pipe segment (1, 2) of definite length for the oil or

gas extraction industry made of a metal, with a central portion with a substantially

cylindrical wall and at least a threaded end portion (3,4) covered with a surface

<u>protection</u>, characterised in that at least the <u>metal</u> surface of the threaded end

portion (3,4) has a surface roughness (Ra) comprised between 2,0 μm and 6,0 μm,

and said surface being covered protection is constituted by one a first-uniform layer

(9) made of a dry corrosion inhibiting coating containing a dispersion of particles

of solid lubricant.

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11. **(Original)** The pipe segment according to claim 10, wherein the uniform

layer (9) contains a dispersion of particles of molybdenum disulphide.

12. (Original) A threaded pipe joint for oil or gas extraction industry made of

male and female threaded pipe members with male and female threads

respectively, wherein at least one of the pipe members has a pipe segment

according to claim 1.

13. (Original) A process to make a threaded end portion of a metallic pipe for

oil extraction industry with the characteristics according to claim 1, comprising the

steps of:

a) Providing surface roughness (Ra) of the pipe metal at least near the

threaded portion with value comprised between 2,0 µm and 6,0 µm;

b) Providing a first uniform layer (7) of a dry corrosion inhibiting coating over

the metal surface at least near the threaded portion;

c) Providing a second uniform layer (8) of dry lubricant coating over the first

uniform layer (7) of corrosion inhibiting coating at least near the threaded portion.

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14. (Original) The process to make a threaded end portion of a metallic pipe for

oil or gas extraction industry with the characteristics according to claim 1,

comprising the steps of:

a) Providing surface roughness (Ra) of the pipe metal at least near the

threaded portion with value comprised between 2,0 µm and 6,0 µm;

b) Providing a first uniform layer (9) of a dry corrosion inhibiting coating

containing a dispersion of particles of solid lubricant over the pipe metal surface at

least near the threaded portion.

15. (Original) The process according to claim 13, wherein the surface

roughness (Ra) of the metal is achieved by abrasive blasting.

16. **(Original)** The process according to claim 13, wherein the surface roughness

(Ra) of the metal is achieved by depositing a phosphate layer on the metal surface.

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